

NISTTech

DIRECT DEPOSIT AND REMOVAL OF NANOSCALE CONDUCTORS

NIST Docket No. 11-003, U.S. Patent Application Publication No. US 2012-0027946 A1

Abstract

A method and apparatus are described for depositing and removing nanoscale conductors. The invention makes use of the NIST-invented magneto-optical trap ion source to create a beam of focused metal ions that either deposit directly at low energy or sputter material away at high energy. Principle advantages include higher conductivity deposition, choice of deposition materials, simpler beam operation, easier process optimization, and less contamination. The primary application is in circuit edit for integrated circuit manufacture.

References

- 11-003Application

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

Last Modified: 05/29/2015